

Notice of Allowability

Application No.

10/724,628

Examiner

Ted Kim

Applicant(s)

WALKER ET AL.

Art Unit

3746

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address--

All claims being allowable, PROSECUTION ON THE MERITS IS (OR REMAINS) CLOSED in this application. If not included herewith (or previously mailed), a Notice of Allowance (PTOL-85) or other appropriate communication will be mailed in due course. **THIS NOTICE OF ALLOWABILITY IS NOT A GRANT OF PATENT RIGHTS.** This application is subject to withdrawal from issue at the initiative of the Office or upon petition by the applicant. See 37 CFR 1.313 and MPEP 1308.

1. ☒ This communication is responsive to 09/13/2005.
2. ☒ The allowed claim(s) is/are 1-9, 11, 12, 14-17, 19 and 20.
3. ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
 - a) ☒ All b) ☐ Some* c) ☐ None of the:
 1. ☒ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this national stage application from the International Bureau (PCT Rule 17.2(a)).

* Certified copies not received: _____.

Applicant has THREE MONTHS FROM THE "MAILING DATE" of this communication to file a reply complying with the requirements noted below. Failure to timely comply will result in ABANDONMENT of this application.

THIS THREE-MONTH PERIOD IS NOT EXTENDABLE.

4. ☐ A SUBSTITUTE OATH OR DECLARATION must be submitted. Note the attached EXAMINER'S AMENDMENT or NOTICE OF INFORMAL PATENT APPLICATION (PTO-152) which gives reason(s) why the oath or declaration is deficient.
 5. ☐ CORRECTED DRAWINGS (as "replacement sheets") must be submitted.
 - (a) ☐ including changes required by the Notice of Draftsperson's Patent Drawing Review (PTO-948) attached
 - 1) ☐ hereto or 2) ☐ to Paper No./Mail Date _____.
 - (b) ☐ including changes required by the attached Examiner's Amendment / Comment or in the Office action of Paper No./Mail Date _____.
- Identifying indicia such as the application number (see 37 CFR 1.84(c)) should be written on the drawings in the front (not the back) of each sheet. Replacement sheet(s) should be labeled as such in the header according to 37 CFR 1.121(d).
6. ☐ DEPOSIT OF and/or INFORMATION about the deposit of BIOLOGICAL MATERIAL must be submitted. Note the attached Examiner's comment regarding REQUIREMENT FOR THE DEPOSIT OF BIOLOGICAL MATERIAL.

Attachment(s)

1. ☐ Notice of References Cited (PTO-892)
2. ☐ Notice of Draftperson's Patent Drawing Review (PTO-948)
3. ☒ Information Disclosure Statements (PTO-1449 or PTO/SB/08),
Paper No./Mail Date 09/13/2005
4. ☐ Examiner's Comment Regarding Requirement for Deposit
of Biological Material
5. ☐ Notice of Informal Patent Application (PTO-152)
6. ☐ Interview Summary (PTO-413),
Paper No./Mail Date _____.
7. ☒ Examiner's Amendment/Comment
8. ☒ Examiner's Statement of Reasons for Allowance
9. ☐ Other _____.

EXAMINER'S AMENDMENT

1. An examiner's amendment to the record appears below. Should the changes and/or additions be unacceptable to applicant, an amendment may be filed as provided by 37 CFR 1.312. To ensure consideration of such an amendment, it MUST be submitted no later than the payment of the issue fee.

Authorization for this examiner's amendment was given in a telephone interview with Warren Taltavull on 10/25/05.

CLAIMS

- 1. (amended) A diffuser arrangement of a combustor for an engine, the diffuser arrangement located upstream of the combustor and comprising a wall surface in a fluid flow conduit formed with an aperture between an upstream part of the wall surface and a downstream part of the wall surface, the downstream part having a step displacement away from a projected profile projected in the downstream direction of the upstream part of the wall surface whereby in use flow momentum in a fluid flow past the wall surface facilitates flow bleed into the aperture; wherein the step displacement is between 0.05 to 0.12 of either the conduit radius or half the conduit cross-sectional width; the aperture has a width at the wall surface between 0.04 to 0.07 of either the conduit radius or half the conduit cross-sectional width.

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- 11. (amended) Apparatus as claimed in claim 1 wherein the step displacement is between 0.06 to 0.1 of either the conduit radius or half the conduit cross-sectional width.
- 14. (amended) An arrangement as claimed in claim ~~1~~ ~~13~~ wherein the width is between 0.05 to 0.06 of either the conduit radius or half the conduit cross-sectional width.
- Claims 13, 21, 22 have been canceled.

2. The following is an examiner's statement of reasons for allowance: the prior art of record do not fairly teach in permissible combination the claimed invention, the preamble of the claims has been given weight in terms of the diffuser being located upstream of the combustor as it breaths life and meaning into the claims. Note, e.g. that a diffuser placed upstream of the combustor would be sized differently than one downstream. The combination of the two sets of ranges for the step displacement, i.e. between 0.05 to 0.12 of either the conduit radius or half the conduit cross-sectional width and the aperture has a width at the wall surface between 0.04 to 0.07 of either the conduit radius or half the conduit cross-sectional width in combination with the rest of the claim limitations renders the combination distinct from the art of record.

3. Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably

accompany the issue fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance."

Contact Information

Any inquiry concerning this communication or earlier communications from the Examiner should be directed to Ted Kim whose telephone number is 571-272-4829. The Examiner can be reached on regular business hours before 5:00 pm, Monday to Thursday and every other Friday.

The fax numbers for the organization where this application is assigned are 571-273-8300 for Regular faxes and 571-273-8300 for After Final faxes.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Timothy Thorpe, can be reached at 571-272-4444.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist of Technology Center 3700, whose telephone number is 703-308-0861. General inquiries can also be directed to the Patents Assistance Center whose telephone number is 800-786-9199. Furthermore, a variety of online resources are available at <http://www.uspto.gov/main/patents.htm>



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